APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/765,542	01/26/2004	Itschak Weissman	200208667-1	1619

22879   7590   03/19/2009
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EXAMINER
GUARINO, RAHEL

ART UNIT	PAPER NUMBER
2611	

NOTIFICATION DATE	DELIVERY MODE
03/19/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

JERRY.SHORMA@HP.COM
mkraft@hp.com
ipa.mail@hp.com

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _01 December 2008_.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _19-32_ is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) _19, 24-26, 30-32_ is/are rejected.
7)☒ Claim(s) _20-23 and 27-29_ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All   b)☐ Some * c)☐ None of:
        1.☐ Certified copies of the priority documents have been received.
        2.☐ Certified copies of the priority documents have been received in Application No. _____.
        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.
4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5)☐ Notice of Informal Patent Application
6)☐ Other: _____.

DETAILED ACTION

1.   This office action is in response to communication filed on 12/01/2008.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2.   Claims 19, 24-26, 30-32 are rejected under 35 U.S.C. 102(e) as being

anticipated by Lucas US 2004/0010746.

        Re claim 19, Lucas discloses an apparatus an input noisy signal, the apparatus

comprising (fig.3):

one or more memories (303,305,307,309); and a controller (301) that receives the noisy

signal z that includes a number of sequentially ordered symbols (para#37, storing the

symbols having the lowest SQ metrics), each symbol having a position (fig.6 shows a

table of the position of symbols) , stores the noisy signal z in the one or more memories

(para#40), receives a signal r, output from a preliminary denoising system that operates

on the received noisy signal z, that includes a number of sequentially ordered symbols

(para#37), each symbol having a position (fig.6 shows a table of the position of

symbols), stores the signal r in the one or more memories (para#37), and produces an

output signal z' by replacing a symbol within each of a number of different

subsequences that occur in the noisy signal z with a corresponding replacement symbol

that the controller computes to provide a minimal estimated signal degradation

(para#34, fir example; replacing if SQ_4 is less SQ_1 , then stored $SYM2_1$ and SQ_1 values

are replaced by $SYM2_4$ and SQ_4, which are different).

Re claim 24, the apparatus of claim 19 wherein a subsequence z(q) is a number

of symbols that precede, follow, or both precede and follow a symbol Zq at position q in

noisy sequence z (para#38).

Re claim 25, the apparatus of claim 24 in which the number of symbols in a

subsequence is determined by the controller to be sufficiently small to ensure that the

number of occurrences of each subsequence is sufficiently large to provide a desired

statistical significance to signal degradation estimation and sufficiently large to ensure

that an adequate number of subsequence correlations contribute to denoising (para#27,

smallest SQ value for a symbol).

Re claim 26, Lucas discloses a method for denoising a noisy signal and partially

corrected signal to generate an output signal, the method comprising (fig.3):

one or more memories (303,305,307,309); and a controller (301) that receives the noisy

signal z that includes a number of sequentially ordered symbols (para#37, storing the

symbols having the lowest SQ metrics), each symbol having a position (fig.6 shows a

table of the position of symbols) , stores the noisy signal z in the one or more memories

(para#40), receives a signal r, output from a preliminary denoising system that operates

on the received noisy signal z, that includes a number of sequentially ordered symbols

(para#37), each symbol having a position (fig.6 shows a table of the position of

symbols), stores the signal r in the one or more memories (para#37), and produces an

output signal z' by replacing a symbol within each of a number of different

subsequences that occur in the noisy signal z with a corresponding replacement symbol

that the controller computes to provide a minimal estimated signal degradation

(para#34, fir example; replacing if SQ_4 is less SQ_1 , then stored $SYM2_1$ and SQ_1 values

are replaced by $SYM2_4$ and SQ_4, which are different).

Re claim 30, the method of claim 26 wherein a subsequence z(q) is a number of

symbols that precede, follow, or both precede and follow a symbol Zq at position q in

noisy sequence z (para#38).

Re claim 31, the method of claim 26 in which the number of symbols in a

subsequence is determined by the controller to be sufficiently small to ensure that the

number of occurrences of each subsequence is sufficiently large to provide a desired

statistical significance to signal degradation estimation and sufficiently large to ensure

that an adequate number of subsequence correlations contribute to denoising (para#27,

smallest SQ value for a symbol

Re claim 32, Lucas discloses a computer readable medium encoded with a data

processing program (para#50) for denoising a noisy signal and a partially corrected

signal to generate an output signal by (fig.3):

receiving the noisy signal z that includes a number of sequentially ordered symbols

(para#37, storing the symbols having the lowest SQ metrics), each symbol having a

position (fig.6 shows a table of the position of symbols) , storing the noisy signal z in the

one or more memories (para#40), receives the partially corrected signal r, output from a

preliminary denoising system that operates on the received noisy signal z, that includes

a number of sequentially ordered symbols (para#37), each symbol having a position

(fig.6 shows a table of the position of symbols), stores partially corrected signal r in the

one or more memories (para#37), and producing an output signal z' by replacing a

symbol within each of a number of different subsequences that occur in the noisy signal

z with a corresponding replacement symbol that the controller computes to provide a

minimal estimated signal degradation (para#34, fir example; replacing if SQ_4 is less SQ_1

, then stored $SYM2_1$ and SQ_1 values are replaced by $SYM2_4$ and SQ_4, which are

different).

Allowable Subject Matter

3.   Claims 20-23, 27-29 are objected to as being dependent upon a rejected base

claim, but would be allowable if rewritten in independent form including all of the

limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Rahel Guarino whose telephone number is (571)270-

1198. The examiner can normally be reached on M-F (7:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Payne David can be reached on 571-272-3024. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Rahel Guarino/
Examiner, Art Unit 2611

/David C. Payne/
Supervisory Patent Examiner, Art Unit 2611